Inflammation: Connecting the mouth and body?

Research suggests chronic inflammation links gum disease to other disease states

Brush after every meal. Floss daily. See your dental professional regularly. These instructions make sense coming from your dentist to help you sustain your oral health. But now not only dentists, but also many physicians, are stressing the importance of maintaining oral health in an effort to keep the rest of the body healthy.

Research has long suggested an association between gum disease and other health issues, including heart disease, stroke and diabetes, but now scientists are beginning to shift their focus to understanding why these connections exist. An emerging theory, and one gaining credibility, is that inflammation itself may be the basis for some patients to receive orthodontic treatment that previously would not be feasible.

“More research is needed to pinpoint the precise biological mechanisms responsible for the relationship between gum disease and other disease states,” Karabin said. “However, previous findings have indicated that gum disease sufferers are at a higher risk for other diseases, making it more critical than ever to maintain periodontal health in order to achieve overall health.”

To avoid gum disease, Karabin recommends comprehensive daily oral care, including regular brushing and flossing, and routine visits to the dentist. If gum disease develops, a consultation with a dental professional, such as a periodontist, can lead to effective treatment. Patients diagnosed with gum disease should also disclose all health conditions to their dental professionals, and be sure to update other health care professionals on their periodontal health.

A recent supplement to the Journal of Periodontology highlighted current discussions between dental professionals and health care professionals on the role of oral inflammation in the progression of other disease states. As research continues to emerge that supports the mouth-body connection, the more vital it becomes that both dentists and physicians work together to ensure the most comprehensive wellbeing for their patients.

Orthodontists have been straightening teeth for decades relying on the ancient physics principle “every action has a reaction,” in which tooth displacement in one part of the jaw causes movement on the other as well.

Use of dental implants as orthodontic anchors, however, is changing that principle by expediting treatment times and expanding possibilities for previously untreatable cases, according to research presented at the American Academy of Implant Dentistry Annual Scientific Meeting in San Diego.

“Dental implants are changing the way orthodontics is being practiced,” said Frank Celenza, DDS, associate clinical professor, New York University College of Dentistry. “In conventional orthodontics, teeth are used to move other teeth, but implants can serve as excellent anchors from which force is applied to move the targeted teeth without causing strain in other teeth.”

In his plenary session presentation, Celenza explained that the use of implants as sources of orthodontic anchorage is a powerful technique that has just begun to be explored.

“In our studies, we’re already seeing cases in which implants simplify and streamline orthodontic therapy, decrease treatment times, and eliminate dependence on patient compliance in making adjustments and wearing orthodontic appliances,” Celenza said. “Because the anchor systems are so much more predictable and stronger when implants are incorporated, the temporal sequencing of tooth movements is eliminated and teeth can be moved en masse or all together. Consequently, treatment times easily can be reduced by a third.”

Celenza added implants can be used in any orthodontic case that requires tooth replacement, as well as for fully dentate patients.

“Cases progress faster when implants are used as anchorage but not because teeth are subject to higher force levels. Rather, it is the result of a more efficient appliance design that provides the ability to move multiple teeth simultaneously rather than individually, as is necessary in conventional orthodontics.”

Dental implants also make it possible for some patients to receive orthodontic treatment that previously would not be feasible.

“Patients with severe orthodontic deformities now can be reevaluated to determine if orthodontic dental implants could provide successful outcomes,” Celenza said.

Commenting on the significance of the research, AAI President Jaime Lozada, DDS, said the orthodontic implant application further underscores the versatility of dental implants for both restorative and cosmetic dental procedures.

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(Source: American Academy of Periodontology)